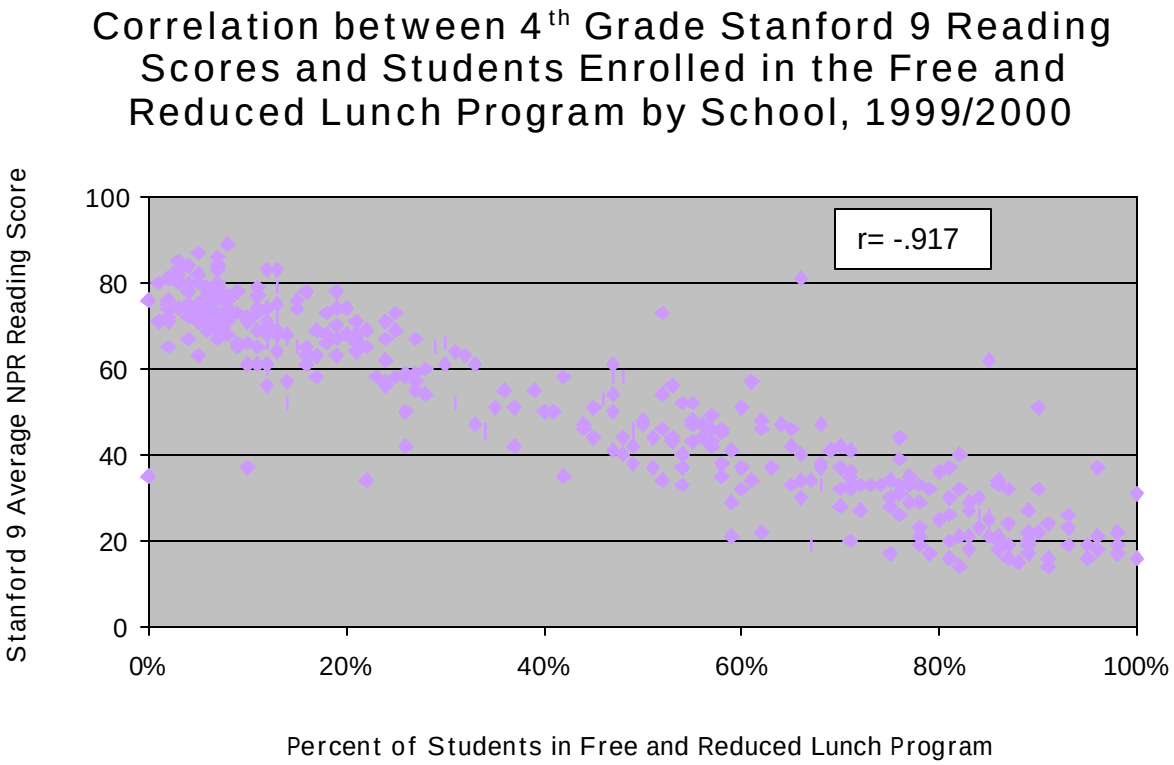
The scatter plot below demonstrates the link between Orange County 4th grade reading achievement test scores in Spring 2000 to the percent of students who receive free or reduced lunches at school. A very strong correlation, *r*=-0.917 for reading, was found between achievement scores and participation in the free and reduced school lunch programs. In the graph below, each point represents one school.

*The Pearson's correlation coefficient, "*r*", ranges from -1.0 to 1.0 and can show the strength of a linear relationship between two variables. The closer "*r*" is to positive or negative 1.0, the stronger the relationship or correlation. Therefore, *r*=-0.917 demonstrates an extremely high correlation between low reading scores and high percentages of students receiving Free and Reduced Lunch, and vice versa.



NOTE: N=356 schools. Some schools had incomplete data and therefore were not included on the above chart.

Reading: Fourth Grade Average Score

This measurement isolates all fourth grade students and takes their average reading score, expressed as a national percentile rank. This is not the same as the percent of questions answered correctly. Rather, it is a comparison of each student's score to the scores of all fourth graders in the national sample. A student who scores in the 65th percentile, for example, has scored higher than 64 percent of the other fourth graders in the national sample. Reading is the subject that educators consider a clear indicator of academic competency in fourth grade. It is the same subject tested at this grade level by the National Assessment of Educational Progress. The data for the Spring 2000 Stanford 9 test comes from the California Department of Education.